



# Tracking the Canadian Economy through COVID-19: Insights from customer transactions - July 2, 2020

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1. Key Insights from Customer Transactions
2. COVID-19, the Canadian Economy and Scotiabank's Transactions Data
3. Business Transactions Data Details
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5. Other High-Frequency Indicators of Activity

# 1. Key Insights from Canadian Customer Transactions

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*This presentation is part of the weekly series intended to draw insights about the state of the Canadian economy from the flow of Scotiabank's retail and non-retail transactions data*

Key takeaways from the payments data in this week's publication:

- Business transactions updated to June 25<sup>th</sup> are currently running just below levels of 2019:
  - Incoming transactions via automated funds transfer (AFT) have failed to break above the levels of 2019, with a recovery in retail and wholesale transactions offset by the continuing weakness in transportation and manufacturing industries.
  - Overall outgoing payments have recently fallen below the level of 2019 due to lower bill payments, while payroll deposits and rent payments have remained weak.
- Consumer transactions available through June 29<sup>th</sup> have recently started to level off:
  - Growth in categories that have been outperforming since the start of the pandemic started to trend lower, explaining most of the recent decline in growth in overall spending.
  - Automotive, clothing and health-related card spending has been in line with levels of last year, while entertainment and restaurants continue to gradually close the gap relative to last year.
  - Some caution is warranted in interpreting the data. First, some of the improvement in card spending is likely due to a substitution away from cash. In addition, more recently the base effects boost year-on-year growth due to the volume of transactions slowing in early June of 2019.

## 2. COVID-19 and the Canadian Economy: Scotiabank Transactions Data

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- We present data on retail and non-retail transactions, which capture distinct but related aspects of economic activity in Canada.
- The data comprises actual observed daily transactions going through debit or credit card payment networks in the retail space, and automatic funds transfers (AFTs) in the non-retail space.
  - The transactions are anonymized and aggregated to protect the privacy of Scotiabank's clients.
- In the current circumstances, comparing the dollar volumes of transactions in the current year and in 2019 can be indicative of the depth of the decline in economic activity in Q2-2020 and help track growth through the re-opening phase.
  - Note that the mapping from the volume of transactions to measures of economic activity (e.g. GDP) is imperfect, and so care must be taken when drawing the implications.
- The AFT payments show bill payments to/from companies in Canada.
  - Incoming payments can be associated with company revenue, and outgoing payments can be associated with costs.
- Debit and credit card payments can be used to measure the evolution of retail spending at various types of establishments.
  - The transactions can serve as a measure of economy-wide retail spending, and of the extent to which households are resuming pre-COVID levels of activity.
  - Note that the use of electronic payments has increased because of COVID-19, so comparisons to year-ago levels can be misleading. These data are best used to observe directional movements rather than to make specific assessments on the level of activity.

## 2. COVID-19 and the Canadian Economy: Caveats

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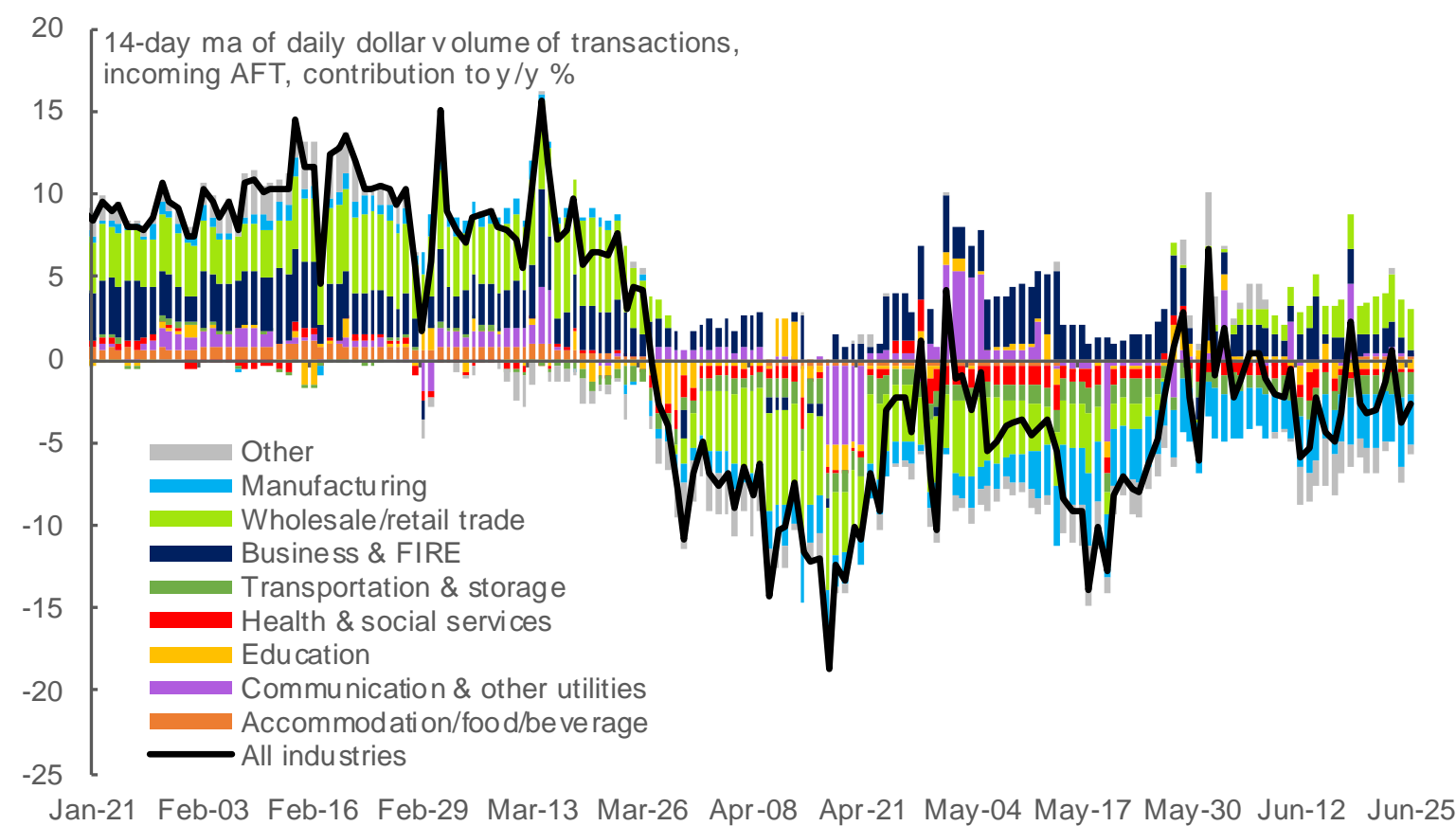
There are important caveats to analysis based on the payments data:

- The data is observed at daily frequency and embeds different types of seasonal patterns.
  - For retail payments, the volume and types of payments are different depending on the day of the week and the season.
  - For non-retail payments, both the day of the week and the season are important. In addition, some payments are tied to the calendar date (e.g. rent payments are made on the first day of each month), some payments have a bi-weekly schedule, etc.
  - To smooth out most of the day-to-day seasonality we use a 14-day moving average of the dollar volume of transactions, taking a  $y/y\%$  change to remove any remaining seasonal patterns related to the calendar date.
- In addition to seasonality, there is normal payment volatility related to the random nature of the transactions process and the impact of regional and economy-wide events (weather, labour strikes, etc.).
  - The volatility of this nature may or may not be related to economic activity as measured by GDP and so, as mentioned above, care must be taken in drawing inference.
- For business transactions, which are inherently more lumpy compared to retail spending, data towards the end of the sample can be revised as some AFT payments are recorded with a lag. As a result we exclude the last few days of data of business transactions only.

### 3. Business Transactions Data: Growth in Incoming Payments Just Below 2019 Levels

- Automated Funds Transfers (AFT) are used for:
  - rent and mortgage payments;
  - payroll deposits; and
  - other bills.
- Incoming transactions continue to average just below the 2019 levels (Chart 1), showing the difficult road to recovery from the sharpest economic downturn in living memory:
  - Recovery in retail and wholesale payments is offset by the continuing weakness in transportation and manufacturing industries (see Charts 2-6).

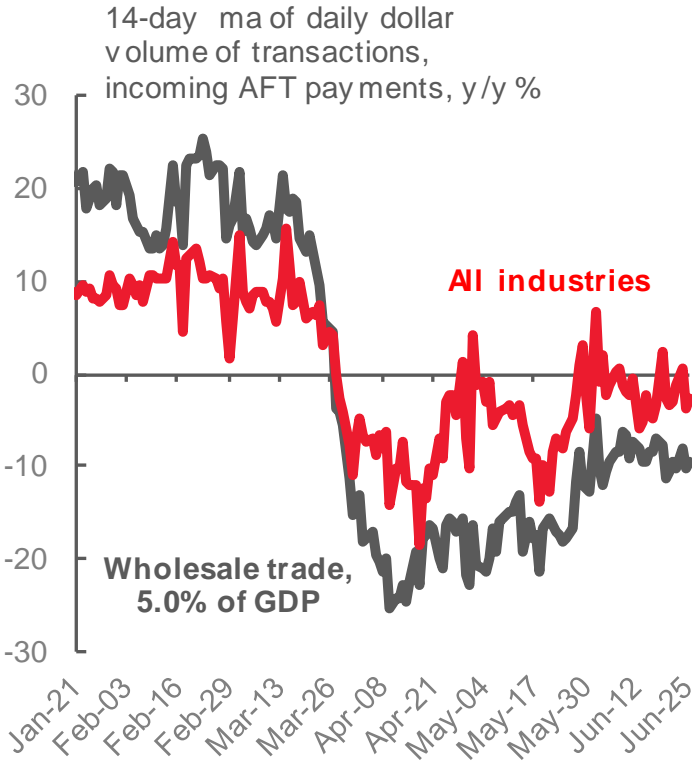
Chart 1



Sources: Scotiabank Economics, Data Science and Analytics.

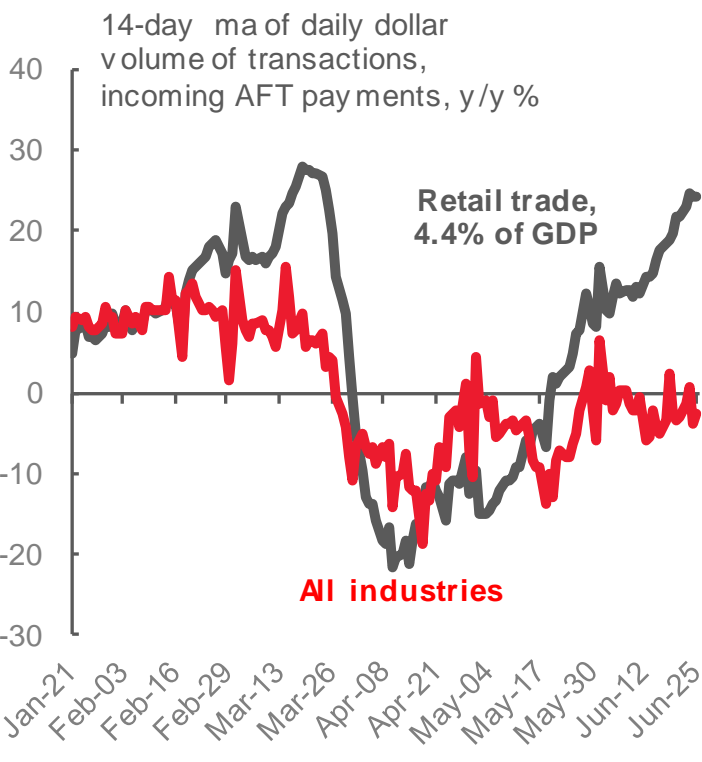
### 3. Business Transactions Data: Retail and Wholesale Trade Rise

Chart 2



Sources: Scotiabank Economics, Data Science and Analytics.

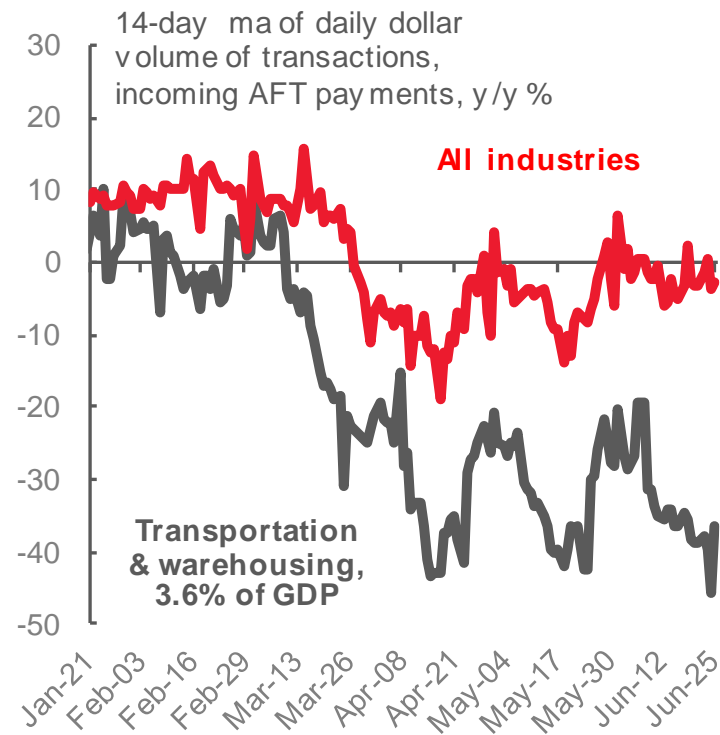
Chart 3



Sources: Scotiabank Economics, Data Science and Analytics.

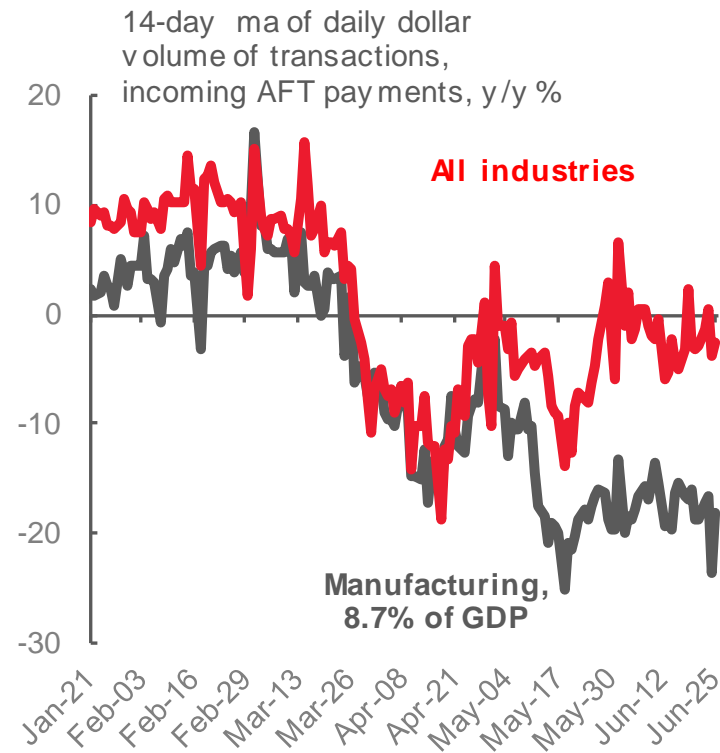
### 3. Business Transactions Data: Manufacturing and Transportation Anemic

Chart 4



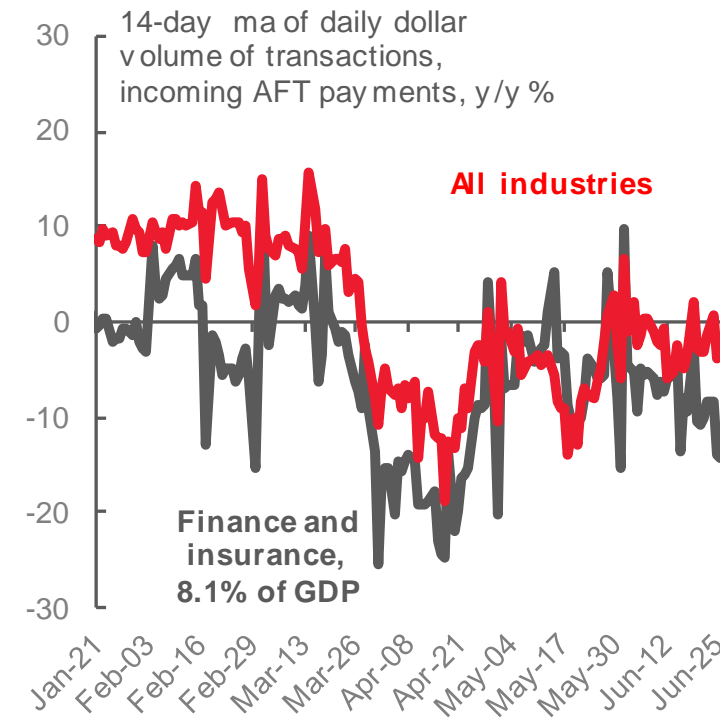
Sources: Scotiabank Economics, Data Science and Analytics.

Chart 5



Sources: Scotiabank Economics, Data Science and Analytics.

Chart 6



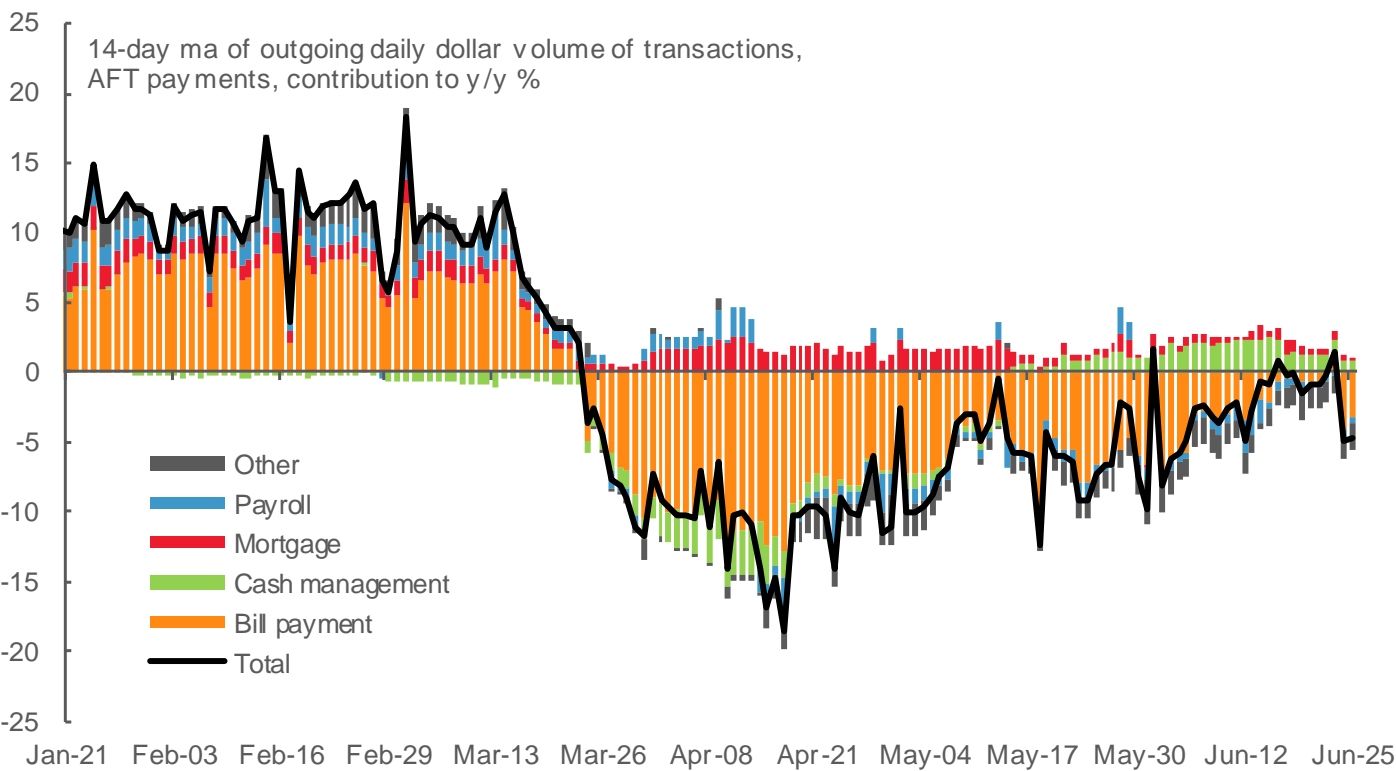
Sources: Scotiabank Economics, Data Science and Analytics.



### 3. Business Transactions Data: Outgoing Bill Payments Fail to Rise Above 2019

- Outgoing AFT payments were comparable to 2019 in mid-June, before falling below in the last few days (Chart 7):
  - General bill payments recently declined relative to 2019 levels.
  - Payroll deposits and rent payments have remained below the levels of last year since late-March (Charts 8 and 9).
  - We are yet to see any improvement in these categories, with the retail sector still under strain and measures of underemployment at record highs.

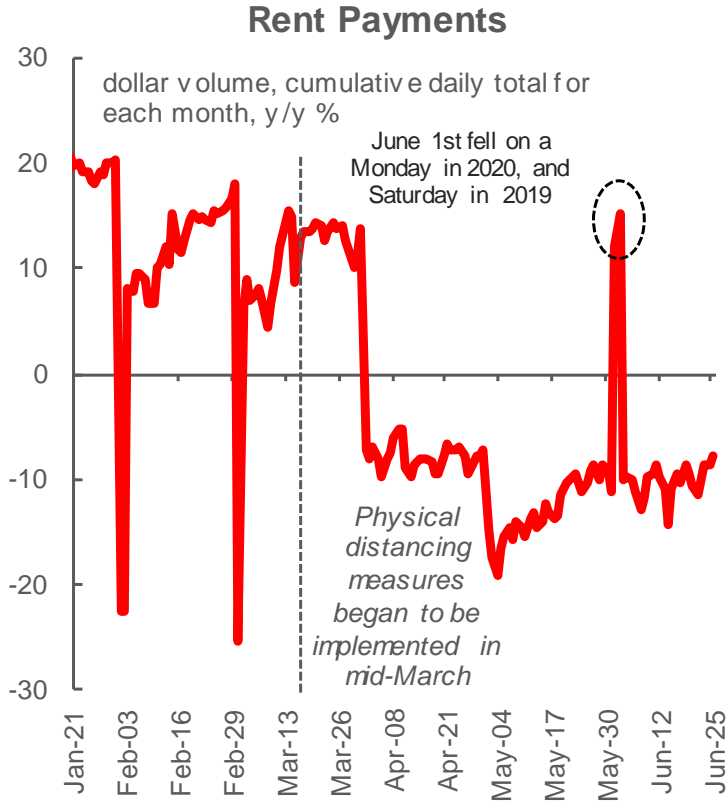
Chart 7



Sources: Scotiabank Economics, Data Science and Analytics.

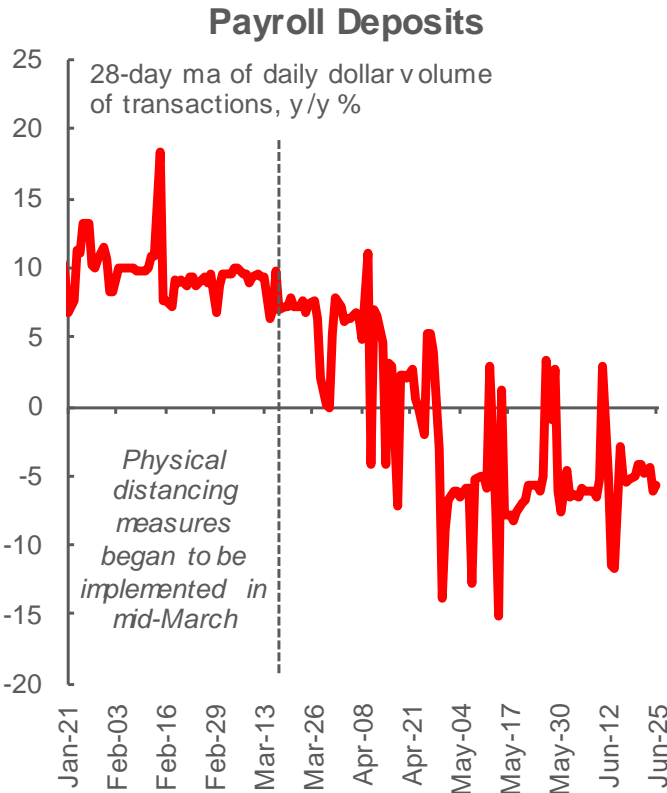
### 3. Business Transactions Data: Rent/Payrolls Still Weak in June

Chart 8



Sources: Scotiabank Economics, Data Science and Analytics.

Chart 9

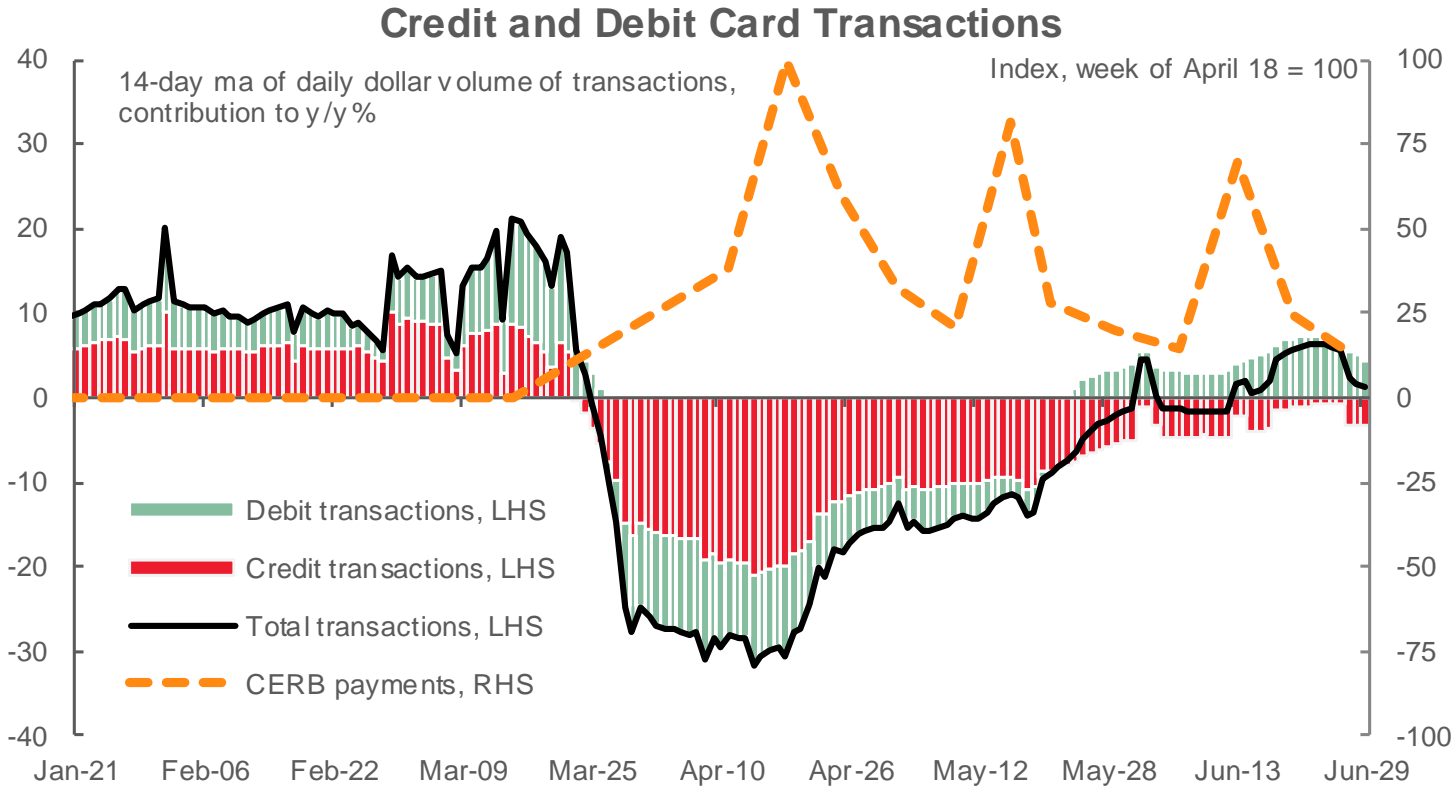


Sources: Scotiabank Economics, Data Science and Analytics.

# 4. Retail Transactions Data: Card Spending Shows Growth Levelling Off

- Card spending shows growth levelling off following an impressive rebound since early May (Chart 10):
  - Both debit and credit card spending have improved since the trough in April, although credit card spending still lags.
- Some caution is warranted in interpreting the data.
  - First, some of the improvement in card spending is likely due to a substitution away from cash.
  - Some of the pickup in spending may reflect a temporary boost due to pent-up demand.
  - Finally, more recently the base effects boosted year-on-year growth due to the volume of transactions slowing in early June of 2019.

Chart 10

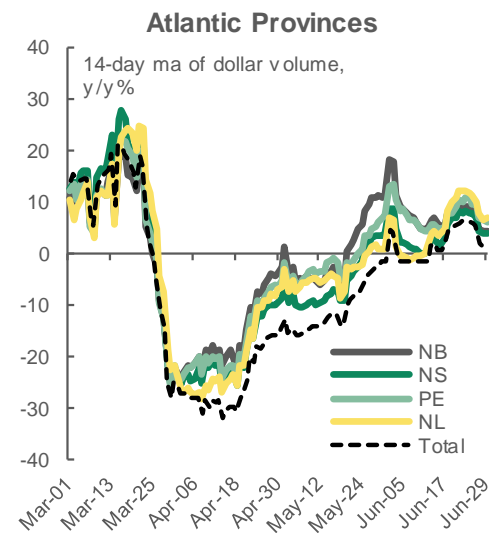


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

# 4. Retail Transactions Data: Pace of Recovery Broadly Consistent across Provinces

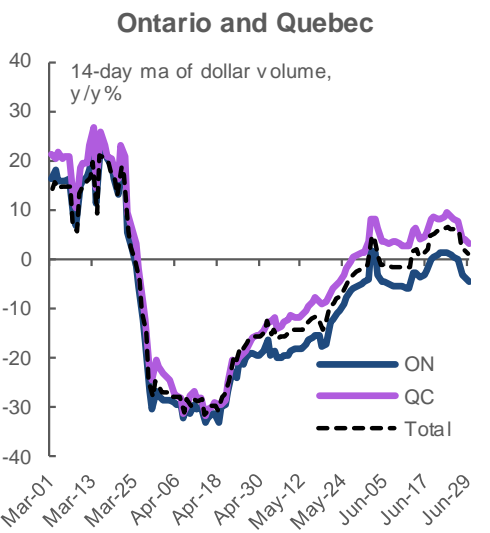
- Province-level data shows a consistent trend across provinces.
- Card spending in Atlantic provinces increased in line with average Canada-wide spending in the second half of June (Charts 11 and 13).
- Card spending in Quebec continues to outpace that in Ontario, but the recent announcement of the Phase 2 re-opening in GTA should help Ontario catch-up (Chart 12).

Chart 11



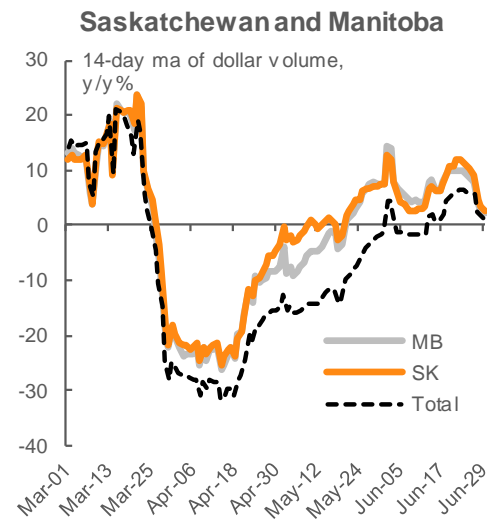
Sources: Scotiabank Economics, Data Analytics.

Chart 12



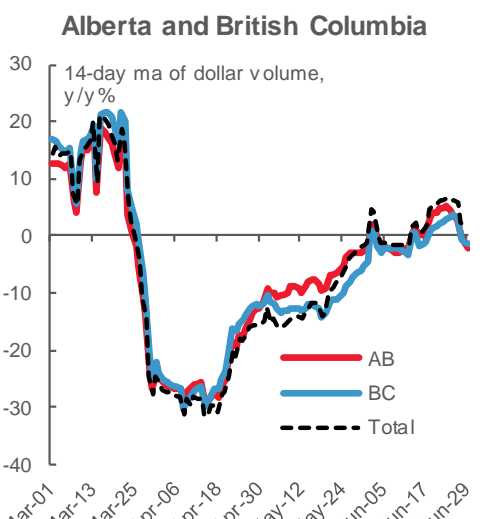
Sources: Scotiabank Economics, Data Analytics.

Chart 13



Sources: Scotiabank Economics, Data Analytics.

Chart 14

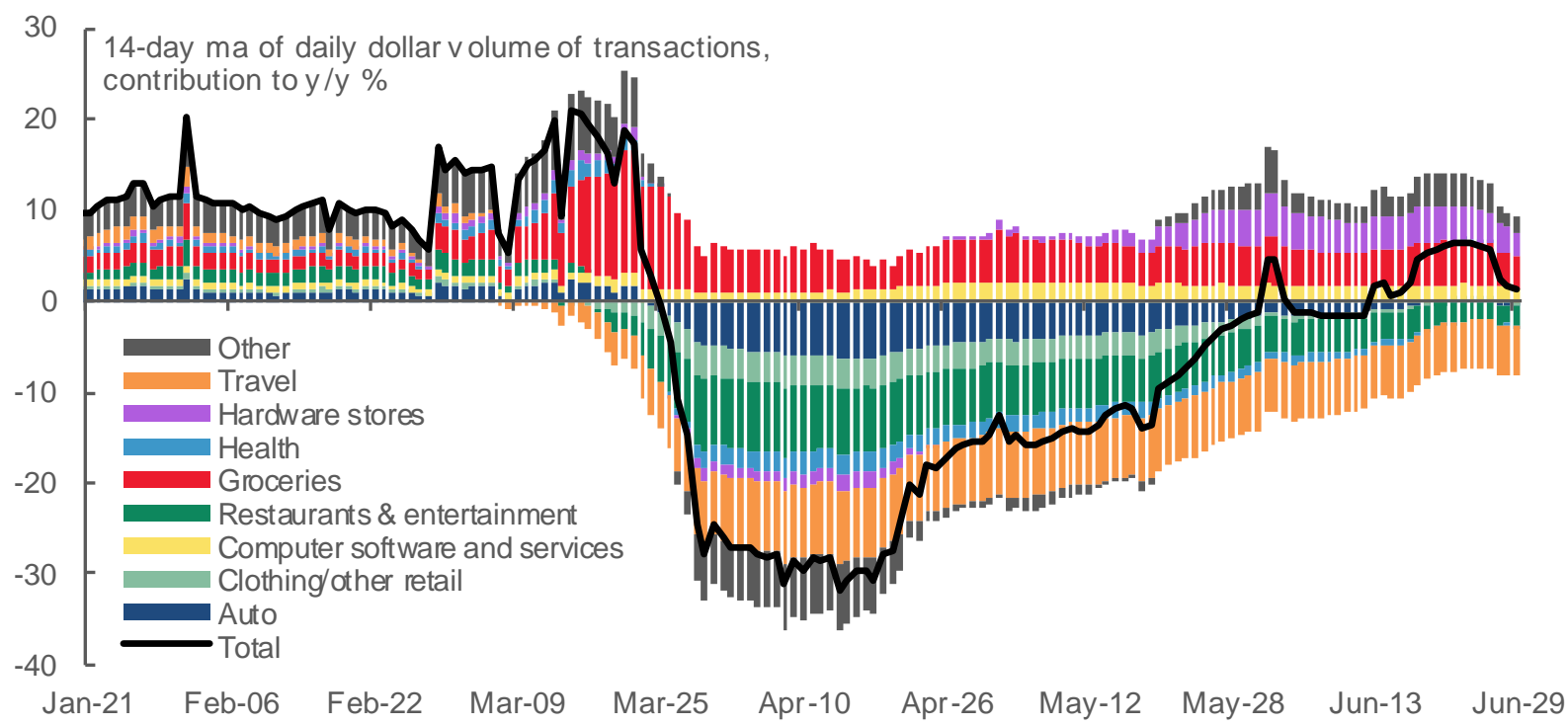


Sources: Scotiabank Economics, Data Analytics.

# 4. Retail Transactions Data: Card Spending Strength Dissipated Somewhat

- By merchant category, rising spending in the categories that were most negatively affected in the March-April period explains the recent pickup in y/y growth in total spending, while growth levelled off in categories that benefited the most since the start of the pandemic (Chart 15).

Chart 15

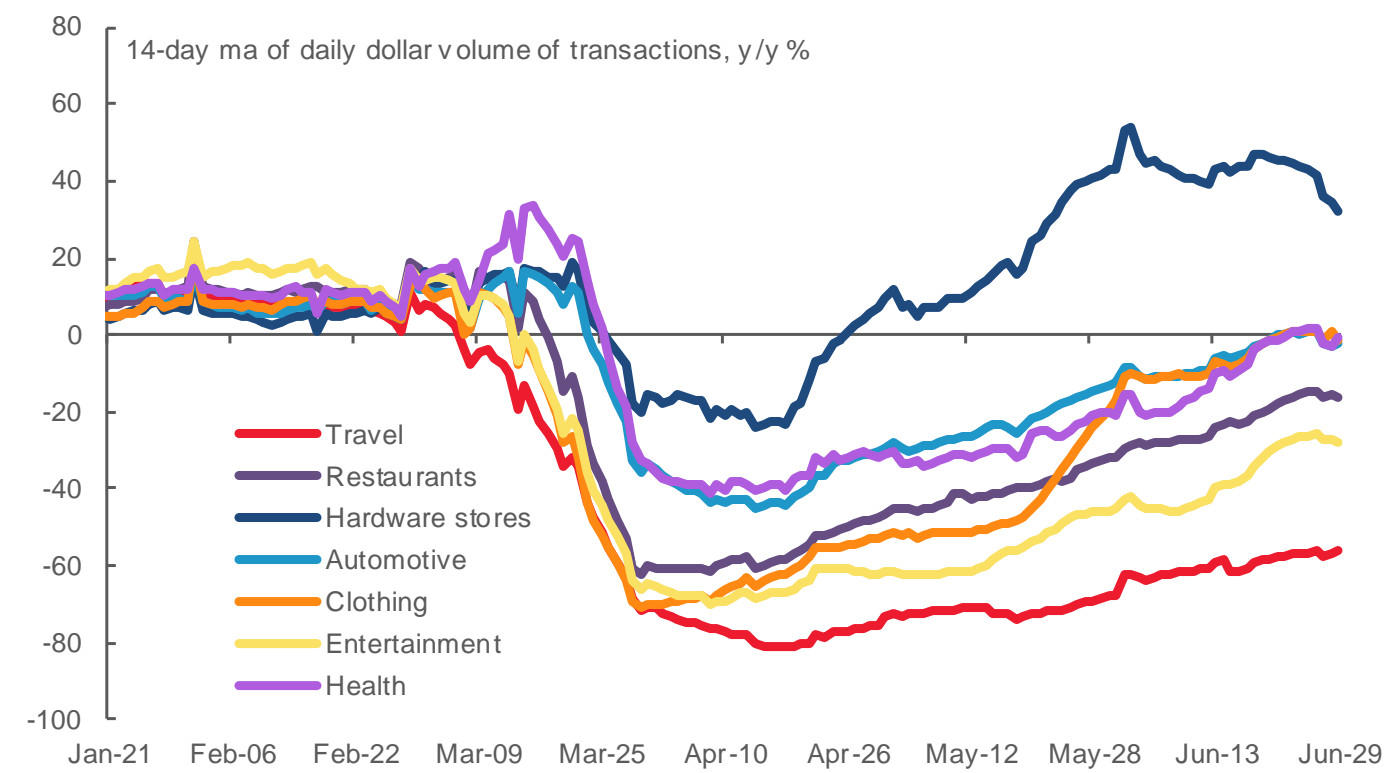


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

## 4. Retail Transactions Data: Those Most Affected See Better Spending Recently

- Some merchants that were most negatively affected by the pandemic-related shutdowns have seen card spending comparable to 2019 in the recent few weeks (Chart 16):
  - Automotive, clothing and health-related card spending has been in line with levels of last year.
  - Spending on entertainment and restaurants continues to strengthen gradually.

Chart 16

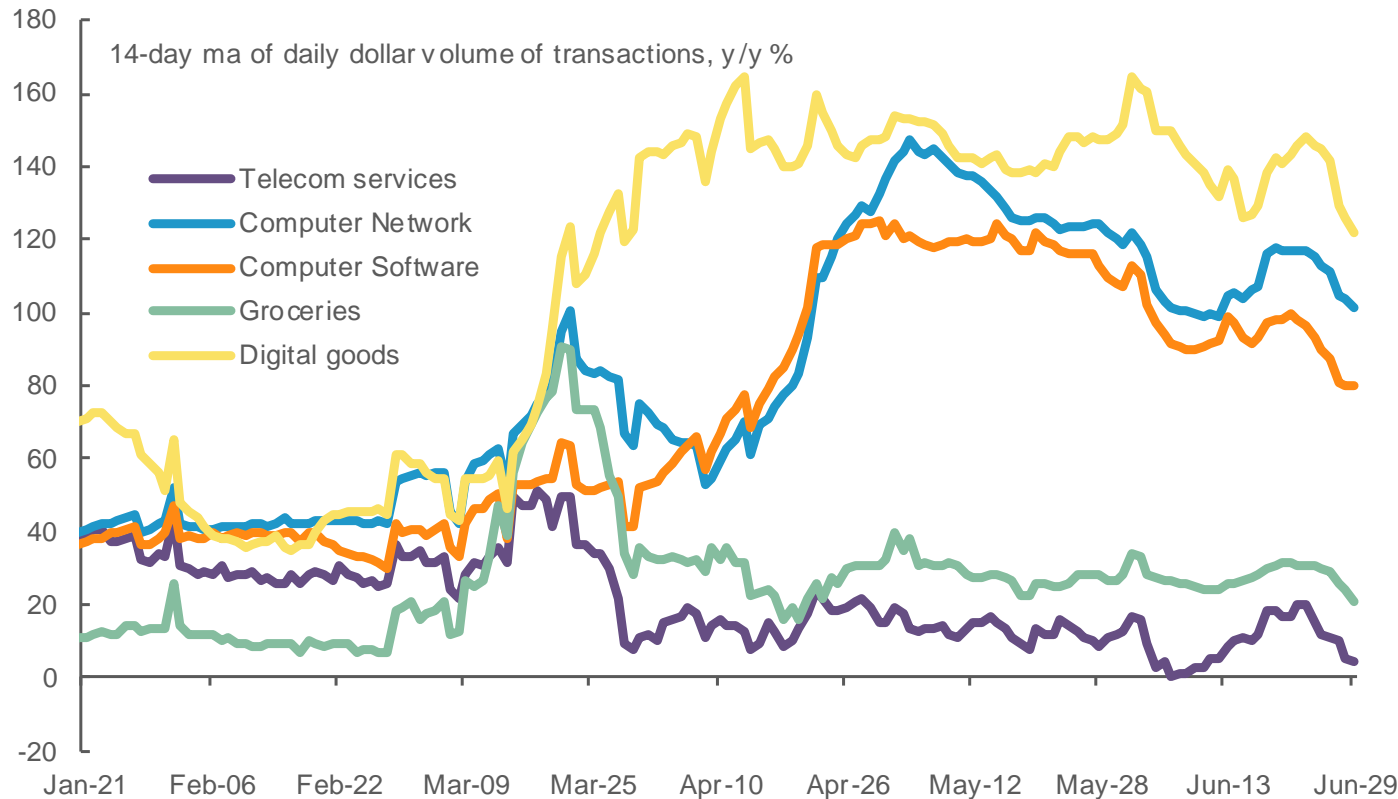


Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

# 4. Retail Transactions Data: Digital Spending Trending Lower

- Weaker y/y growth in categories that have been outperforming since the start of the pandemic explains most of the recent decline in overall spending growth (Chart 17).
  - Growth in spending on consumer network services (e.g. Amazon), computer software and digital goods (e.g. videogames) started to trend lower recently, coming off the record highs.

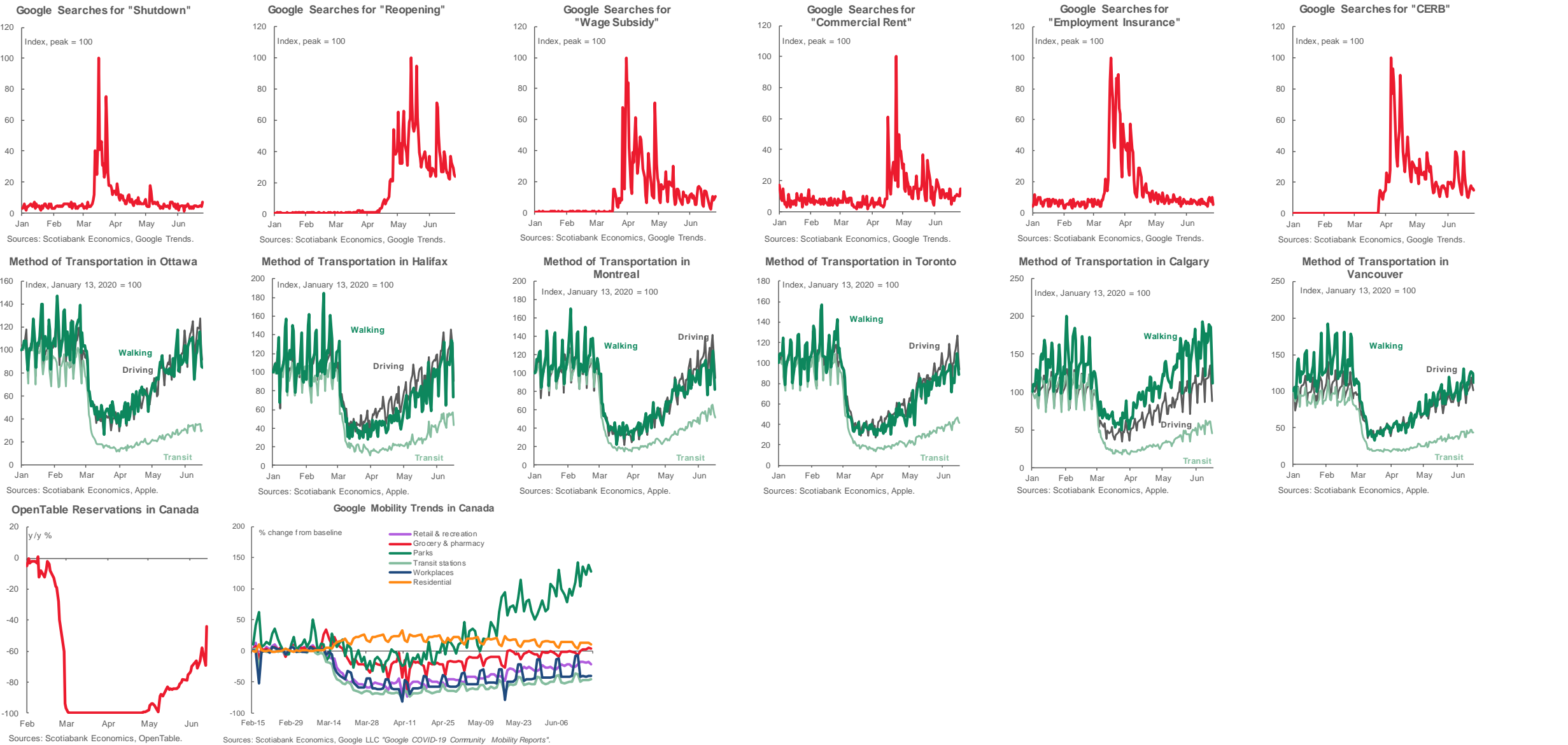
Chart 17



Sources: Scotiabank Economics, Customer Insights, Data & Analytics.

# 5. Other High-Frequency Indicators Of Activity

## Charts 18-31: Google Searches, Various Keywords, Dining and Transportation Data





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We analyzed anonymized automated funds transfers (ATFs) by businesses through the Automated Clearing Settlement System where Scotiabank is one of the parties. The analysis was based on 22 Transaction Codes (see [Payments Canada](#) for more information on transaction types) across 20 industries. We also analyzed anonymized retail transactions (debit and credit card payments) through Scotiabank, with 18 broad spending categories based on 264 merchant types. Finally, we used aggregated totals for deposits related to the Canada Emergency Response Benefit made into customer accounts in chart 12, indexing the series to 100 at the maximum weekly total.

For each type of transaction (retail and ATF), we calculated a 14-day moving average daily in 2020 through early May and compared to a corresponding average for the same month and day in 2019.